

Thomas J A Slater

List of Publications by Year in descending order

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56
papers

1,734
citations

304743

22
h-index

289244

40
g-index

60
all docs

60
docs citations

60
times ranked

2841
citing authors

#	ARTICLE	IF	CITATIONS
1	Atomic Structure and Valence State of Cobalt Nanocrystals on Carbon under Syngas Versus Hydrogen Reduction. <i>Journal of Physical Chemistry C</i> , 2022, 126, 6325-6333.	3.1	7
2	The Critical Role of PdZn Alloy in Pd/ZnO Catalysts for the Hydrogenation of Carbon Dioxide to Methanol. <i>ACS Catalysis</i> , 2022, 12, 5371-5379.	11.2	23
3	Trainable segmentation for transmission electron microscope images of inorganic nanoparticles. <i>Journal of Microscopy</i> , 2022, 288, 169-184.	1.8	7
4	Enhanced H_2O_2 Production via Photocatalytic O_2 Reduction over Structurally-Modified Poly(heptazine imide). <i>Chemistry of Materials</i> , 2022, 34, 5511-5521.	6.7	21
5	The Selective Oxidation of Cyclohexane via In-situ H_2O_2 Production Over Supported Pd-based Catalysts. <i>Catalysis Letters</i> , 2021, 151, 2762-2774.	2.6	14
6	Oleylamine Aging of PtNi Nanoparticles Giving Enhanced Functionality for the Oxygen Reduction Reaction. <i>Nano Letters</i> , 2021, 21, 3989-3996.	9.1	37
7	Efficient energy transport in an organic semiconductor mediated by transient exciton delocalization. <i>Science Advances</i> , 2021, 7, .	10.3	68
8	Gold-Rhodium Nanoflowers for the Plasmon-Enhanced Hydrogen Evolution Reaction under Visible Light. <i>ACS Catalysis</i> , 2021, 11, 13543-13555.	11.2	36
9	A high-throughput, solvent free method for dispersing metal atoms directly onto supports. <i>Journal of Materials Chemistry A</i> , 2021, 9, 26676-26679.	10.3	6
10	PtNi bimetallic structure supported on UiO-67 metal-organic framework (MOF) during CO oxidation. <i>Journal of Catalysis</i> , 2020, 391, 522-529.	6.2	7
11	The effect of nano-twins on the thermoelectric properties of $\text{Ga}_2\text{O}_3(\text{ZnO})_m$ ($m = 9, 11, 13$ and 15) homologous compounds. <i>Journal of the European Ceramic Society</i> , 2020, 40, 5549-5558.	5.7	11
12	General synthesis of single atom electrocatalysts via a facile condensation-carbonization process. <i>Journal of Materials Chemistry A</i> , 2020, 8, 25959-25969.	10.3	14
13	Design-controlled synthesis of IrO_2 sub-monolayers on Au nanoflowers: marrying plasmonic and electrocatalytic properties. <i>Nanoscale</i> , 2020, 12, 12281-12291.	5.6	20
14	Hemoglobin-derived Fe-Nx-S species supported by bamboo-shaped carbon nanotubes as efficient electrocatalysts for the oxygen evolution reaction. <i>Carbon</i> , 2020, 168, 588-596.	10.3	12
15	Automated Single-Particle Reconstruction of Heterogeneous Inorganic Nanoparticles. <i>Microscopy and Microanalysis</i> , 2020, 26, 1168-1175.	0.4	13
16	Correlation of the ratio of metallic to oxide species with activity of PdPt catalysts for methane oxidation. <i>Catalysis Science and Technology</i> , 2020, 10, 1408-1421.	4.1	15
17	Three-Dimensional Imaging of Nanoparticle Chemistry Using Spectroscopic Single Particle Reconstruction. <i>Microscopy and Microanalysis</i> , 2019, 25, 400-401.	0.4	0
18	Preface "Electron microscopy of beam-sensitive materials. <i>Micron</i> , 2019, 125, 102716.	2.2	0

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19	Imaging Three-Dimensional Elemental Inhomogeneity in Pt@Ni Nanoparticles Using Spectroscopic Single Particle Reconstruction. <i>Nano Letters</i> , 2019, 19, 732-738.	9.1	18
20	Next frontiers in cleaner synthesis: 3D printed graphene-supported CeZrLa mixed-oxide nanocatalyst for CO ₂ utilisation and direct propylene carbonate production. <i>Journal of Cleaner Production</i> , 2019, 214, 606-614.	9.3	54
21	The taxonomy of graphite nanoplatelets and the influence of nanocomposite processing. <i>Carbon</i> , 2019, 142, 99-106.	10.3	16
22	Micron-scale crack propagation in laser-irradiated enamel and dentine studied with nano-CT. <i>Clinical Oral Investigations</i> , 2019, 23, 2279-2285.	3.0	13
23	Au@HgxCd _{1-x} Te core@shell nanorods by sequential aqueous cation exchange for near-infrared photodetectors. <i>Nano Energy</i> , 2019, 57, 57-65.	16.0	38
24	Unravelling the transport mechanism of pore-filled membranes for hydrogen separation. <i>Separation and Purification Technology</i> , 2018, 203, 41-47.	7.9	13
25	On the influence of Mn on the phase stability of the CrMn _x FeCoNi high entropy alloys. <i>Intermetallics</i> , 2018, 92, 84-92.	3.9	68
26	Realizing the theoretical stiffness of graphene in composites through confinement between carbon fibers. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 113, 311-317.	7.6	22
27	Hierarchical integration of porosity in shales. <i>Scientific Reports</i> , 2018, 8, 11683.	3.3	88
28	Investigating the Effect of Zirconium Oxide Microstructure on Corrosion Performance: A Comparison between Neutron, Proton, and Nonirradiated Oxides. , 2018, , 491-523.		5
29	Nanocomposites of graphene nanoplatelets in natural rubber: microstructure and mechanisms of reinforcement. <i>Journal of Materials Science</i> , 2017, 52, 9558-9572.	3.7	41
30	Crystallographic effects on the corrosion of twin roll cast AZ31 Mg alloy sheet. <i>Acta Materialia</i> , 2017, 133, 90-99.	7.9	83
31	Multiscale correlative tomography: an investigation of creep cavitation in 316 stainless steel. <i>Scientific Reports</i> , 2017, 7, 7332.	3.3	33
32	Hydrogen evolution and capacitance behavior of Au/Pd nanoparticle-decorated graphene heterostructures. <i>Applied Materials Today</i> , 2017, 8, 125-131.	4.3	20
33	Degradation of metallic materials studied by correlative tomography. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 219, 012001.	0.6	7
34	Automated quantification of morphology and chemistry from STEM data of individual nanoparticles. <i>Journal of Physics: Conference Series</i> , 2017, 902, 012018.	0.4	3
35	Quantitative Energy-Dispersive X-Ray Analysis of Catalyst Nanoparticles Using a Partial Cross Section Approach. <i>Microscopy and Microanalysis</i> , 2016, 22, 71-81.	0.4	36
36	Compositional quantification of PtCo acid-leached fuel cell catalysts using EDX partial cross sections. <i>Materials Science and Technology</i> , 2016, 32, 248-253.	1.6	11

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37	X-Ray Absorption Correction for Quantitative Scanning Transmission Electron Microscopic Energy-Dispersive X-Ray Spectroscopy of Spherical Nanoparticles. <i>Microscopy and Microanalysis</i> , 2016, 22, 440-447.	0.4	7
38	STEM-EDX tomography of bimetallic nanoparticles: A methodological investigation. <i>Ultramicroscopy</i> , 2016, 162, 61-73.	1.9	74
39	An investigation of diffusion-mediated cyclic coarsening and reversal coarsening in an advanced Ni-based superalloy. <i>Acta Materialia</i> , 2016, 110, 295-305.	7.9	69
40	Non-rigid registration and non-local principle component analysis to improve electron microscopy spectrum images. <i>Nanotechnology</i> , 2016, 27, 364001.	2.6	30
41	Asymmetric MoS ₂ /Graphene/Metal Sandwiches: Preparation, Characterization, and Application. <i>Advanced Materials</i> , 2016, 28, 8256-8264.	21.0	64
42	Energy Dispersive X-ray Tomography for 3D Elemental Mapping of Individual Nanoparticles. <i>Journal of Visualized Experiments</i> , 2016, , .	0.3	4
43	Recent progress in scanning transmission electron microscope imaging and analysis: application to nanoparticles and 2D nanomaterials. <i>SPR Nanoscience</i> , 2016, , 168-192.	0.6	1
44	Revealing New Atomic-scale Information about Materials by Improving the Quality and Quantifiability of Aberration-corrected STEM Data. <i>Microscopy and Microanalysis</i> , 2015, 21, 2409-2410.	0.4	0
45	Surface Segregated AgAu Tadpole-Shaped Nanoparticles Synthesized Via a Single Step Combined Galvanic and Citrate Reduction Reaction. <i>Chemistry - A European Journal</i> , 2015, 21, 12314-12320.	3.3	17
46	Controlling Size, Morphology, and Surface Composition of AgAu Nanodendrites in 15 s for Improved Environmental Catalysis under Low Metal Loadings. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 25624-25632.	8.0	42
47	Precise control of interface anisotropy during deposition of Co/Pd multilayers. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	10
48	Bilayer graphene formed by passage of current through graphite: evidence for a three-dimensional structure. <i>Nanotechnology</i> , 2014, 25, 465601.	2.6	11
49	Real-time imaging and elemental mapping of AgAu nanoparticle transformations. <i>Nanoscale</i> , 2014, 6, 13598-13605.	5.6	64
50	Real-time imaging and local elemental analysis of nanostructures in liquids. <i>Chemical Communications</i> , 2014, 50, 10019-10022.	4.1	56
51	Ultrastructure and Crystallography of Nanoscale Calcite Building Blocks in <i>Rhabdosphaera clavigera</i> Coccolith Spines. <i>Crystal Growth and Design</i> , 2014, 14, 1710-1718.	3.0	17
52	Correlating Catalytic Activity of Ag-Au Nanoparticles with 3D Compositional Variations. <i>Nano Letters</i> , 2014, 14, 1921-1926.	9.1	119
53	Measurement of size-dependent composition variations for gamma prime (γ') precipitates in an advanced nickel-based superalloy. <i>Ultramicroscopy</i> , 2014, 144, 1-8.	1.9	45
54	Understanding the limitations of the Super-X energy dispersive x-ray spectrometer as a function of specimen tilt angle for tomographic data acquisition in the S/TEM. <i>Journal of Physics: Conference Series</i> , 2014, 522, 012025.	0.4	12

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55	Correlative Tomography. Scientific Reports, 2014, 4, 4711.	3.3	124
56	Self assembled monolayers (SAMs) on metallic surfaces (gold and graphene) for electronic applications. Journal of Materials Chemistry C, 2013, 1, 376-393.	5.5	87